

(11)Publication number:

11-054048

(43) Date of publication of application: 26.02.1999

(51)Int.CI.

9/02 H01J H01J 9/395

(21)Application number: 09-207527

(71)Applicant: MATSUSHITA ELECTRIC IND CO

LTD

(22)Date of filing:

01.08.1997

(72)Inventor: AOKI MASAKI

SUZUKI SHIGEO

TANAKA HIROYOSHI

(54) PLASMA DISPLAY PANEL AND ITS MANUFACTURE

(57)Abstract:

PROBLEM TO BE SOLVED: To improve the secondary electron emitting coefficient of a protecting layer to reduce the discharge voltage and improve the emission luminance by covering a dielectric glass layer with a protecting layer consisting of diamond-like carbon (amorphous diamond).

SOLUTION: A front panel 10 is manufactured by forming a discharge electrode (display electrode) 12 on a front glass base 11, covering the surface with a lead-based dielectric glass layer 13, and forming a diamond-like carbon protecting layer 14 on the surface of the dielectric glass layer 13. The protecting layer 14 has an amorphous membrane structure consisting of diamondlike carbon. The protecting layer 14 consisting of diamond-like carbon is formed by use of plasma CVD or plasma torch CVD. In the plasma CVD by use of a CVD device, for example, the glass base is heated at a prescribed temperature, and a plasma is then generated in the device body by reducing the pressure and applying

a high frequency electric field, and the protecting layer 14 is formed while carrying a gas.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]